

REMARKS

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I. Introduction

This paper is being presented in response to an official action dated January 15, 2002, wherein all pending claims (claims 14 and 17-54) were rejected under 35 U.S.C. § 103(a). More specifically, according to the action:

- (A) Claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 were rejected under § 103(a) as being obvious over:
 - (1) Baymiller U.S. Patent No. 3,816,236 (the “Baymiller patent”) in view of McClain U.S. Patent No. 1,299,747 (the “McClain patent”); and
 - (2) Molloy et al. U.S. Patent No. 3,916,059 (the “Molloy patent”) in view of the Baymiller patent;
- (B) Claims 22, 23, 34, 35, 46, and 47 were rejected under § 103(a) as being obvious over:
 - (1) the Baymiller patent in view of the McClain patent and further in view of Guyette U.S. Patent No. 5,425,986 (the “Guyette patent”); and
 - (2) the Molloy patent in view of the Baymiller patent and further in view of the Guyette patent;
- (C) Claims 18-21, 30-33, and 42-45 were rejected under § 103(a) as being obvious over:
 - (1) the Baymiller patent in view of the McClain patent and further in view of Brooker et al. U.S. Patent No. 5,723,221 (the “Brooker patent”); and
 - (2) the Molloy patent in view of the Baymiller patent and further in view of the Brooker patent;



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(D) Claims 25 and 49 were rejected under § 103(a) as being obvious over:

- (1) the Baymiller patent in view of the McClain patent and Hsu U.S. Patent No. 4,822,440 (the "Hsu patent"); and
- (2) the Molloy patent in view of the Baymiller patent.

Dependent claim 50 has been objected to under 37 C.F.R. § 1.75(c) for failing to limit the subject matter of independent claim 37 from which it depends.

Reconsideration and withdrawal of the rejections and objections are respectfully requested in view of the following remarks.

The patentability arguments set forth in "Amendment 'B'" filed November 30, 2000, "Amendment 'C'" filed June 1, 2001, "Amendment 'D'" filed November 6, 2001, are applicable here and, therefore, are incorporated herein by reference.

Claim 50 has been canceled without prejudice.

In compliance with 37 C.F.R. § 1.121, attached hereto is a sheet (numbered as page 11) showing the cancellation of claim 50 by this amendment. The attached sheet is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

II. The Subject Matter of the Pending Claims 14, 17-49, and 51-54

A summary of the subject matter of the pending claims 14, 17-49, and 51-54 was set forth at pages 5 and 6 of Amendment "B," at pages 3 and 4 of Amendment "D" and, for the sake of brevity, is not reiterated here.

III. Proper Basis for Rejections Under 35 U.S.C. § 103(a)

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings of a plurality of references. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when



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combined) must teach or suggest all of the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on the applicant's own disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

The examiner bears the burden of establishing a *prima facie* case of obviousness and "can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). To support a conclusion that a claimed combination is obvious, either: (a) the references must expressly or impliedly suggest the claimed combination to one of ordinary skill in the art, or (b) the examiner must present a convincing line of reasoning as to why a person of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. & Inter. 1985). Where the teachings of various references conflict, the examiner must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another. *In re Young*, 18 U.S.P.Q.2d 1089 (Fed. Cir. 1991).

IV. All of the § 103(a) Rejections Are Traversed

The action does not make out a *prima facie* case of obviousness with respect

to the pending claims.

All of the § 103(a) rejections are based on the combination of either the Baymiller patent in view of the McClain patent or the Molloy patent in view of the Baymiller patent. Neither of these bases, however, supports a *prima facie* case of obviousness of any of the independent claims (i.e., claims 14, 17, 37, 51, and 53).

A. No *Prima Facie* Case of Obviousness Exists Based on the Combination of the Baymiller and McClain Patents

The primary reference — the Baymiller patent — teaches the use of a cross-banding material to secure a veneer sheet to a wood core. The cross-banding sheet is

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described as a *porous felt material*. (The Baymiller patent at column 1, lines 40-44.) To secure the veneer to the wood core, the cross-banding sheet is coated and saturated with a urea-formaldehyde resin and then disposed between the veneer sheet and the wood core to form a layered structure. The layered structure then is consolidated under heat and pressure for a period such that the resin forms a strong bond between the veneer and core. (The Baymiller patent at column 2, lines 11-37.) The action cites the disclosure in the Baymiller patent of "a kraft paper which has been saturated with the urea-formaldehyde and then partially cured before panel assembly." (The Baymiller patent, at column 1, lines 32-34.) The complete context of this disclosure, however, shows that this disclosure expressly describes the *undesirability* of using such a material. Specifically:

International Paper Company had previously made urea-formaldehyde resin sheet, but experienced trouble in its use. Their particular product is a kraft paper which has been saturated with the urea-formaldehyde and then partially cured before panel assembly. Control of the semicure is critical and creates problems in manufacture and storage which could be costly, if not handled with care.

(The Baymiller patent at column 1, lines 30-37.)

Contrary to the statements in the action, the Baymiller patent expressly teaches that a resin-saturated kraft paper is *not* suitable. Armed with this express teaching, a person of ordinary skill in the art would not substitute (in fact, would be led away from substituting) such a material for the cross-banding material suggested by the very same Baymiller patent.

The law mandates that a reference must be considered for all that it teaches, not just some part that supports a particular position. *In re Hedges*, 228 U.S.P.Q. 685, 687 (Fed. Cir. 1986). The examiner cannot simply pick and choose those portions of the reference which support his position and ignore those portions that do not. *Id.* Thus, the examiner is not free to discard the Baymiller patent teachings that mandate the use of a porous felt material as the cross-banding material, and adopt the Baymiller patent teachings against using a resin-saturated kraft paper, absent motivation in the applied references to do so and a reasonable expectation of success.

By the teachings and disclosure in the Baymiller patent, one skilled in the art is not aware that warping of the consolidated product is a problem. (The instant application

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at page 3, lines 9-16, however, states that a design which does not utilize a balancing veneer or heavy duty backer paper, e.g., the one set forth in the Baymiller patent, undesirably results in a warped consolidated wood product.) Without such an awareness, the skilled artisan would not be motivated to modify the teachings of the Baymiller patent. Even if the skilled artisan were aware of warping problems in the finished product of the Baymiller patent, (s)he certainly would not be led to practice the Baymiller patent teachings.

The secondary reference — the McClain patent — teaches the application of a heavy-duty backer paper to core surfaces without a veneer overlay to impart a moisture-, oil-, and acid-proof covering to the product. (See the McClain patent at page 2, line 115 to page 3, line 6.) There is no indication in the McClain patent that the use of the backer paper on a core surface that is not also covered with a veneer sheet will temper or prevent warping of the consolidated product. (To the contrary, such an indication is found only in the instant application, at page 3, lines 9-16.) By the teachings and disclosure set forth in the McClain patent, the skilled artisan is not aware that warping of a consolidated wood product is a problem. Without such an awareness, the skilled artisan would not be motivated to modify the teachings of the McClain patent. Consequently, the McClain patent can provide no basis for a position that its disclosure provides the skilled artisan a reasonable expectation that replacement of the backer paper disclosed therein with the kraft paper disclosed in (and discouraged by) the Baymiller patent, use of the saturation characteristic taught by the Baymiller patent (i.e., saturation of a porous felt material) as opposed to the coating characteristic taught by other references (e.g., the Hsu patent), and dispensation with the teachings to use a balancing veneer, will successfully yield a board product that is moisture-, oil-, or acid-proof, much less *unwarped*.

Neither of the disclosures of the Baymiller and McClain patents acknowledges that warping is a problem present in the manufacture of layered composite wood products containing a veneer sheet. Of these patents, the Baymiller patent discloses that cracking and warping of *face veneers* has been addressed by employing a cross-banding sheet (see the Baymiller patent at column 1, lines 15-19). Cracking and warping of *face veneers*, however, are different types of defects than *warping of layered composites containing a veneer sheet*. The techniques one might use to overcome or temper cracking and warping of face veneers, do not address or suggest to the skilled artisan how one can overcome warping of layered composite wood products containing a veneer sheet.

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Since warping of the consolidated wood product is not a problem recognized by the Baymiller and McClain patents, one skilled in the art would not be motivated to combine their teachings. It is respectfully submitted that the suggested combination can be motivated solely by hindsight reasoning guided by the applicant's own disclosure — reasoning that is expressly forbidden during the examination of a claim under § 103(a). *In re Gorman*, 18 U.S.P.Q.2d 1885, 1888 (Fed. Cir. 1991); *In re Fritch*, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992). Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

The rejected, dependent claims (*i.e.*, 18-36, 38-49, and 52-54) are patentable because each recites limitations to the invention recited in the patentable independent claims (*i.e.*, claims 14, 17, 37, 51, and 53). *See In re Fine*, 5 U.S.P.Q.2d at 1600. Notwithstanding that no *prima facie* case of obviousness exists with respect to the independent claims, no *prima facie* case of obviousness exists with respect to any of the dependent claims. The deficiencies in the Baymiller and McClain patents with as applied to the dependent claims are set forth at pages 13-15 of Amendment "D," for example, and, for the sake of brevity, are not reiterated here as Amendment "D" has been incorporated herein by reference. Accordingly, reconsideration and withdrawal of the rejection of all of the pending claims 14, 17-49, and 51-54 are respectfully requested.

B. No Prima Facie Case of Obviousness Exists Based on the Combination of the Molloy and Baymiller Patents

Alternative bases for rejecting all of the claims under § 103(a) are premised on the combination of the Molloy and Baymiller patents. No *prima facie* case of obviousness, however, exists based on this combination.

The secondary reference under these bases for rejection — the Baymiller patent — has been discussed above. The primary reference — the Molloy patent — is directed to a five-layer panel consisting of a cellulosic wood core sandwiched between cross-banding sheets, a thin veneer or facing sheet adhered to the outer surface of one of the cross-banding sheets, and a backing sheet adhered to the outer surface of the other cross-banding sheet. (See Figure 1 and column 3, lines 44-55 of the Molloy patent.) The cross-banding sheets are made of a combination of glass fibers and cellulose fibers (The Molloy patent at

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column 1, lines 65 et seq.). The core is made up of wood lumber, scraps, or chips held together by a thermosetting resin. The veneer is a thin hardwood and the backing paper is made of poplar or other lower cost material. (The Molloy patent at column 3, lines 56 to column 4, line 34.) The Molloy patent, at column 5, lines 18-20, teaches that the "glass fibers in the cross-banding sheets provide strength which is instrumental in resisting warping of the core."

The Molloy patent essentially teaches one skilled in the art that two cross-banding sheets containing glass fibers are instrumental in resisting warping of the core. The applied references and/or general knowledge attributable to a skilled artisan provide no motivation to discard the glass fiber-containing cross-banding sheets and substitute the porous felt material or kraft paper saturated with urea-formaldehyde resin as disclosed in the Baymiller patent therefor. (As noted above, the Baymiller patent itself discourages the use of kraft paper saturated with urea-formaldehyde.) Even if motivation is present under some yet-unknown theory, the skilled artisan has no reasonable expectation that (s)he can obtain an unwarped product as recited in the claims of the present application.

Furthermore, the Molloy patent teaches the use of a backing sheet. Based on the Molloy patent disclosure, one skilled in the art understands that the two glass fiber-containing cross-banding sheets are "instrumental in resisting warping of the core," and that at the very least the backing sheet likely assists in resisting such warping. If the backing sheet provided no such assistance, it would serve no purpose. The applied references and/or general knowledge attributable to the skilled artisan provide no motivation to discard the backing sheet mandated by the Molloy patent teachings. Even if motivation is present under some yet-unknown theory, the skilled artisan has no reasonable expectation that (s)he can obtain an unwarped product as recited in the claims of the present application.

In other words, an element of the claimed invention is that a veneer layer is disposed or is present on *only one* of the resin-saturated sheet layers; and that no second layer is present on the other resin-saturated sheet layer. (*See* independent claims 14, 17, 37, 51, and 53.) This element is not found in either the Molloy or Baymiller patents. To the contrary, the Molloy patent requires the use of a backing paper. (*See e.g.*, the Molloy patent at column 2, lines 64-67.) Nothing in the Molloy or Baymiller patents provides motivation to the skilled artisan to modify the patents' teachings to arrive at the product recited in claims 14, 17, 37, 51, and 53 of the present application. Furthermore, nothing in these patents



provides any reasonable expectation of the success achieved by the applicant. Accordingly, no *prima facie* case of obviousness exists based on this combination of references.

Reconsideration and withdrawal of all of the § 103(a) rejections are respectfully requested.

C. No Other Combinations of the Applied Prior Art Can Support a § 103(a) Rejection of the Pending Claims

In view of the foregoing arguments, reconsideration and withdrawal of the rejections of the dependent claims are respectfully requested. Specifically, Parts I.(B)-(D), above, identify the dependent claims and the bases for rejecting these claims according to the action. Since the bases for rejecting each of the independent claims are premised on the position that the independent claims are *prima facie* obvious (which they are not) in view of the combination of either the Baymiller patent in view of the McClain patent or the Molloy patent in view of the Baymiller patent, and since the arguments set forth above dispel any such position, the applicant respectfully requests reconsideration and withdrawal of the rejections of the dependent claims.

V. The Objection to Claim 50

Claim 50 has been canceled, without prejudice, thereby obviating the objection set forth in the action with respect to this claim.

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CONCLUSION

In view of the foregoing, cancellation of claim 50, reconsideration and withdrawal of all of the § 103(a) rejections, and allowance of all pending claims 14, 17-49, and 51-54 are respectfully requested.

Should the examiner wish to discuss the foregoing, or any matter of form or procedure in an effort to advance this application to allowance, he is urged to contact the undersigned attorney.

Respectfully submitted,

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In the Claims:

Please cancel claim 50, without prejudice.

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